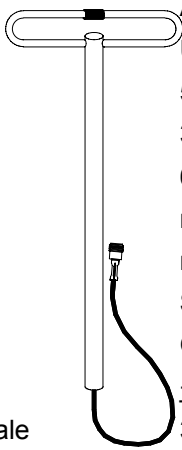
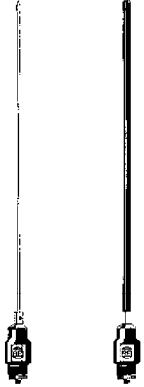


## Technical Note TN-36

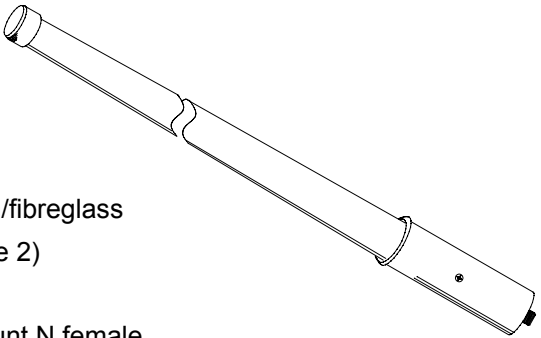
# 450 - 480 MHz OMNI Antenna Characteristics

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<b>Type (model #)</b>	<b>ANTOMNI/4</b>
Gain (note 1)	Unity gain
Impedance	50 Ohm
Overall Length	30 cm (boom)
Tube Diameter	32 mm
Wind Loading (160 kph)	1.0 kg
Effective Wind Area	161 sq cm
Material	Aluminium
Pattern	Omni (note 2)
Bandwidth E Plane	$\pm 50^\circ$
Tail Connection	150 mm N type female
Mounting Hole	-

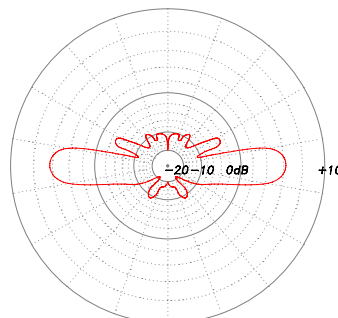
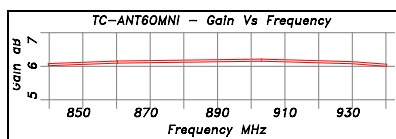
<b>ANT450/D</b>		<b>ANT450/D</b>	
Gain (note 1)	Unity gain	Unity gain	
Impedance	50 Ohm	50 Ohm	
Overall Length	30 cm (boom)	395mm (requires trimming)	
Tube Diameter	32 mm	6 mm (base 25mm)	
Wind Loading (160 kph)	1.0 kg	n/a	
Effective Wind Area	161 sq cm	n/a	
Material	Aluminium	Stainless Steel or Tube (black)	
Pattern	Omni (note 2)	Omni	
Bandwidth E Plane	$\pm 50^\circ$	$\pm 76^\circ$	
Tail Connection	150 mm N type female	3m low loss RG58 with BNC connector	
Mounting Hole	-	9mm	

<b>Type (model #)</b>	<b>ANT450/6OM</b>
Gain (note 1)	6dBd
Impedance	50 Ohm
Overall Length	3.4.0 m
Support Tube Dia.	38 mm
Wind Loading (160 kph)	5.5 kg
Effective Wind Area	452 cm <sup>2</sup>
Material	Aluminium/fibreglass
Pattern	Omni (note 2)
Bandwidth E Plane	$\pm 14^\circ$
Connection	Direct mount N female

<b>ANT450/9OM</b>	
Gain (note 1)	9dBd (11.2dBi)
Impedance	50 Ohm
Overall Length	5.0 m
Support Tube Dia.	48 mm
Wind Loading (160 kph)	18.0 kg
Effective Wind Area	-
Material	Aluminium/fibreglass
Pattern	Omni (note 2)
Bandwidth E Plane	$\pm 12^\circ$
Connection	Direct mount N female

Note: Galvanised 90° U clamps (50mm dia max.) available Part # TC-CLAMPS.

## E Plane Polar Characteristics



Note 1: Gain is referred to a standard dipole and varies with frequency as shown.

Note 2: Mounting omni antennas close to other structures will distort their circular pattern and affect gain and VSWR.